

direction, the first and second pairs of loops connected together, and a tubular graft connected to each spring, wherein the tubular graft has a pair of free ends, the annular springs being connected to each of the free ends. The Examiner rejected claim 21 under 35 U.S.C. §102(b) as being anticipated by *Lazarus* and under 35 U.S.C. §102(e) as being anticipated by *Robinson*.

The Examiner has still avoided explaining exactly where the folds are in the cited references. This is because neither *Lazarus* nor *Robinson* is folded. Rather, the staple 16 of *Lazarus* and the expanded segment 33 of *Robinson* are wires that are permanently bent to form serpentine rings that are not thereafter folded. For example, *Lazarus* has described the staple 16 as being a stainless steel spring wire that is bent to form apexes (62) and abutment points (63). *See Lazarus, page 10, lines 9-15*. Once bent, the wire is soldered or welded at a selected point to be unending. *Id.* Similarly, *Robinson* describes his expandable segments 33 and 35 as being "a single continuous segment of wire having a series of zigzag bends (37)." *See Robinson, column 6, lines 33-35*. Thus, the wires of *Lazarus* and *Robinson* are bent to form a ring that has internal zigzag bends. There is no mention in *Lazarus* or *Robinson* of folding the annulus once shaped.

In contrast, the claim calls for folded, resilient annular springs. That is, the claim calls for the annular springs themselves to be folded and not for the annular springs to have internal bends. There is a difference and this difference is why neither *Lazarus* nor *Robinson* anticipates the claims. Thus, the rejection should be reversed.

#### CLAIM 24

Claim 24 depends from claim 21 and calls for one of the annular springs to be formed by a plurality of strands of resilient wire having a substantially common central axis. For the first time, the Examiner asserts that the legs (60A through 60D of Figure 3) of *Lazarus's* staple 16 anticipate the claimed limitation. Additionally, the Examiner also asserts that *Robinson's* "legs" are also a plurality of strands of resilient wire having a substantially common central axis.

The term strand refers to any one of the threads, wires, etc. that are twisted together to form a string, cable, etc. See *Webster's New World™ Compact Desk Dictionary and Style Guide (1998)*. Additionally, a strand is defined as a rope-like length of anything [a strand of pearls]. *Id.*

The individual legs of either *Lazarus* or *Robinson* are not a plurality of strands. If anything, the staple 16 of *Lazarus* and the expandable segment 33 of *Robinson* constitute one strand that is bent upon itself. See *Robinson* at column 6, lines 32-37; see also *Lazarus* at page 10, lines 6-14. This is even true when the separate legs of *Lazarus's* support member 60 are welded, glued or soldered together. In other words, the joined legs form one continuous strand.

Even if the separate legs of *Lazarus* or *Robinson* were misconstrued to be strands, the axis of the individual legs is not centrally common. In fact, the axes of adjacent legs intersect, which would render them not common. In other words, the central axis referred to by the Examiner is the axis of a single, continuous strand. However, if the legs are wrongly considered strands the axis shifts to that of the individual legs, which clearly is not substantially common to all legs.

Thus, neither *Lazarus* nor *Robinson* anticipates claim 24 and the rejection should be reversed.

#### CLAIM 63

Claim 63 was rejected under 35 U.S.C. §102(b) as being anticipated by *Kwan-Gett*. Claim 63 calls for a ring comprising a bundle of overlapping windings formed of a strand of resilient wire, the ring being located adjacent to one of the free ends of a tubular graft. The Applicant respectfully maintains that *Kwan-Gett* does not disclose a bundle of overlapping windings formed from a strand of resilient wire. In contrast, *Kwan-Gett* discloses a stiff circular stent that is made from a thin flat spring material that is concentrically wound into a torsion spring such as a watch or clock spring. *See column 6, lines 7-31*. Simply, as explained in the Applicant's appeal brief and reply brief the stiff torsion spring of *Kwan-Gett* is not tantamount to the claimed invention. Thus, the rejection should be reversed.

#### CLAIM 64 AND CLAIM 65

Claim 64 and 65 were rejected under 35 U.S.C. §102(b) as being anticipated by *Kwan-Gett*. Claim 64 depends from claim 63, and claim 65 is an independent claim. Each claim calls for the minimum bending diameter of the ring to be less than that of a solid ring of the same dimensions. The Examiner reasserts after remand that it is an inherent property for the minimum bending diameter of a ring of a plurality of wires to be less than that of a solid ring of the same dimensions. Moreover, the Examiner has redefined the minimum bending diameter to be the bending force required to deform, i.e., strain a ring. *See Paper No. 29, page 7*. The Applicant respectfully maintains that *Kwan-Gett* does

not necessarily demonstrate that the minimum bending diameter of his ring is less than that of a solid ring of the same dimensions. Moreover, the Applicant maintains that the minimum bending diameter is not to be redefined as the bending force.

The minimum bending diameter is the minimum bending diameter about which a wire can be bent without plastic deformation. *See Specification at page 8, lines 30-33.* Because *Kwan-Gett* is a stiff, flat band that is concentrically wound, it will have a thin edge that is not prone to bending. *See column 5, lines 7-31.* Moreover, the circular stent of *Kwan-Gett* is not designed to bend in the direction of the edge; rather it is designed to be more tightly wound when compressed. *Id.; see column 6, lines 44-68.* Thus, it is not apparent how a ring such as *Kwan-Gett's* can be folded upon its thin edge without undergoing deformation.

Further, the stiff, flat bands of *Kwan-Gett* are parallel to each other when wound. Thus, it is not apparent how the minimum bending diameter of the composite would be different from a solid of the same dimensions. That is, because the stiff, flat bands are parallel they may be stacked one upon the other so that they "fit together". Thus, it is not apparent how when bent upon its thin edge, the minimum bending diameter of *Kwan-Gett's* spring will be altered from a solid ring of the same dimensions. As such, the rejection of claims 64 and 65 should be reversed.

Respectfully submitted,

Date: August 22, 2002



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PATENT TRADEMARK OFFICE

A handwritten signature in dark ink, appearing to read 'Rhonda L. Sheldon', written over a horizontal line.

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